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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,993

09/06/2006

Rainer Muller

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EXAMINER

BLACK, MELISSA ANN

ART UNIT

PAPER NUMBER

3612

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,993	Applicant(s) MULLER ET AL.	
	Examiner MELISSA A. BLACK	Art Unit 3612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 12 and 19-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 12 and 19-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/2/06, 9/29/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *intermediate space* between *internal paneling* and *an external skin* of the *vehicle* of claims 1, 2 and 19, *zigzagged* or *curved* of claim 27, *sinusoidal* or *cosinusoidal* of claim 28, and *a curvature of the external skin* of claim 29, *the vertical course of the plurality of barrier layers is delimited by two inner vertically diametrically opposed and horizontally positioned boundary faces of at least two insulation regions* of claim 25, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4, 12 and 19-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to what is meant by burn-through unsafe. Is this material partially burn-through or completely burn-through.

4. Claim 12 recites the limitation "the barrier layers" in line. There is insufficient antecedent basis for this limitation in the claim. This claim should depend from claim 2.

5. Claims 19-33, it is unclear as to what is meant by barrier layer in these claims for it is depicted as layers 14a and 14b in the specification, and now in these claims it seems as though it is the whole insulation package (3). Please be consistent with terminology throughout the claims. What is the barrier layer referring to in claims 19-33? In order to further prosecution examiner is interpreting barrier layer of claims 19-33 to be 14a and 14b.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-4, 12 and 19-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat # 6,565,040 to Fay et al in view of US Pat # 3,567,162 to Lea.

Re Claim 1, Fay et al discloses an insulation structure for the internal insulation of a vehicle, comprising an insulation package (30), implemented using an insulation, and a film (26) positioned next to external skin (28), wherein the insulation package (30) is constructed using distinct insulation regions (See Figures 1-3), which are implemented using a first insulation (24) whose insulation material is burn-through safe, and a second insulation (22) whose insulation material is burn-through unsafe, these insulation regions being positioned along a finite series and laid next to one another up to a final insulation region (See Figures 1-3), whose insulation material is exchanged in alternating sequence. Re Claim 2, Fay et al discloses the insulation package (30) is implemented homogeneously using a second insulation (22), whose insulation material is burn-through unsafe, in which multiple burn-through safe barrier layers (24) are integrated. RE Claim 4, Fay et al discloses a second insulation region, which is implemented using the burn-through unsafe insulation material (22) of the second insulation, is laid next to each of a first and a third insulation region (see figure 3) , which are equipped with the burn-

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through safe insulation material of the first insulation (24), and following the third and each further insulation region, which are equipped with the burn-through safe insulation material of the first insulation (24), a further insulation region is positioned, which is equipped with the burn-through unsafe insulation material of the second insulation (see figure 3). Re claim 12, Fay et al discloses wherein the film (26), the first insulation (24), and the barrier layers (24) are implemented using a material of high fire resistance, which is implemented as sufficiently resistant or insensitive to occurring fire or both, because of which propagation of the fire, which would flame against a surface region of the barrier layer in this situation, is prevented.

Fay et al fails to disclose the insulation package is positioned inside an intermediate space between internal paneling and the external skin of the vehicle.

Lea teaches the use of an insulation package (10) between an internal paneling (24) and an external skin (18) of the vehicle (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the internal paneling as taught by Lea on the device of Fay in order to protect the insulation package from damage during everyday wear and tear.

Re Claim 3, Fay et al, as modified fails to disclose wherein a first insulation region and an insulation region terminating the series are implemented using the insulation material of the first insulation.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to start and finish the insulation package with the same first insulation for it is a mere location of parts and requires little to no skill in the art.

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Re Claim 19, Fay et al discloses an insulation structure for the internal insulation of a vehicle subject to accidental exposure of the vehicle to a fire external to the vehicle, the insulation structure comprising an insulation package with an external skin of the vehicle, and the insulation package comprises: at least one barrier layer; at least one insulation region; and a film providing an external surface of the insulation package, wherein the at least one insulation region is not capable of preventing burn-through of the fire, and the at least one barrier layer is capable of preventing burn-through of the fire, and the at least one barrier layer is positioned such that the insulation package is made burn through safe. Re claim 20, Fay et al discloses as least one barrier lay is comprised of at least one burn-through safe insulation region (24). Re Claim 21, Fay et al discloses at least one barrier layer is a plurality of barrier layers, and the plurality of barrier layers are integrated in the at least one insulation region (see figures). Re Claim 22, Fay et al discloses at least two burn through safe insulation regions (24). Re Claim 23, Fay et al discloses an insulation region (22) is disposed between the at least two burn through safe insulation regions (See figures). Re claim 24, Fay et al discloses that the barrier layers lead without interruption through the at least one insulation region and up to a peripheral edge of at least one insulation region (see Abstract). Re Claim 25, Fay et al discloses the use of vertical course of the plurality of barrier layers (24) is delimited by two inner vertically diametrically opposed and horizontally positioned boundary faces of at least two insulation regions (22) (see abstract). Re Claim 26, Fay et al disclose that the barrier layers (24) lead close to or press against two outer boundary faces of the at least one insulation region (22), the two outer boundary faces being horizontally diametrically opposing and vertically positioned. Re Claim 29, Fay et al disclose that the insulation package (20) is shaped to a curvature of the external skin

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(28) (see figures 1-3). Claims 30-33, Fay et al discloses the film and the at least one barrier layer is of a fire resistant material or fireproof fibrous material (see Columns 3-4), and the material is of a ceramic, a carbon, a silicate or combination thereof (column 4, lines 20-25), and wherein the film is completely enveloped by the film (column 3 line 4).

Re Claim 19, Fay et al fails to disclose the insulation package is positioned inside an intermediate space between internal paneling and the external skin of the vehicle.

Lea teaches the use of an insulation package (10) between an internal paneling (24) and an external skin (18) of the vehicle (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the internal paneling as taught by Lea on the device of Fay in order to protect the insulation package from damage during everyday wear and tear.

Re Claims 27 and 28, Fay et al fails to disclose that the insulation package is implemented as straight or zigzagged, or sinusoidal or cosinusoidal.

Lea teaches that the insulation package is implemented as straight or zigzagged, or sinusoidal or cosinusoidal (see Figure 1).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to made the package implemented as straight or zigzagged, or sinusoidal or cosinusoidal as taught by Lea on the device of Fay et al in order to thicken the insulation layer in between the external and inner panel.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA A. BLACK whose telephone number is (571)272-4737. The examiner can normally be reached on M-F 7:00-3:30 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. A. B./
Examiner, Art Unit 3612

/Hilary Gutman/
Primary Examiner, Art Unit 3612